**National University of Computer & Emerging Sciences**

**Karachi Campus**



**Project Report**

**CS-217**

**Object Oriented Programming**

**HOSPITAL MANAGEMENT SYSTEM**

[20K-1099 Ahmed Azaan ]

[20K-1702 Bilal Mamji ]

[20k-1705 Abdul-Rehman Sudais]

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. **Acknowledgment**

We came up with this idea from our PF project in the first semester. Stackoverflow website had many different ideas related to the project that we could work on and hospital management system was one of them so we as a group decided to go for it since it was quite comprehensive and manageable. Apart from efforts of all the team members, the section of this project report topic depends largely on the encouragement and guidance provided by our teachers. We take this opportunity to express our gratitude to the teachers who have been instrumental in the approval of this topic.

1. **Introduction**

The purpose of the project is to computerize the front office management of the hospital to develop software which is user friendly, fast and cost effective. It deals with different kinds of patient’s information like add patient, search patient etc. Traditionally it was done manually.

Our project draws its basics from the same code we did for the PF project in the previous semester. It covers all the basic concepts a hospital management needs like various different patient, doctor entries. One feature we have added is the generation of patient’s bill which would display the patient’s bill at the end.

The concepts of OOP have been integrated with the introduction of the classes and objects to cover the basic principles of OOP. This project stores and register patient and doctor details and retrieve these details when and as required and also to manipulate these details meaningfully. Computers are not only used to increase the efficiency in all fields ranging from fixing the appointment with the doctor to keeping the record of the patient

1. **Tools and technologies used**

Programming language: **C++**

Operating System: **Windows**

Tool used: IDE **Visual Studio 2019**

List of header files:

* **#include<isogram>**
* **#include<fstream>**
* **#include<string>**
* **#include<conio.h>**
* **#include<string.h>**
* **#include<cstdlib>**

1. **Programming Concepts Used**

The programming concepts that we have used are following:

* Classes
* Objects
* Inheritance
* Loop (FOR and WHILE)
* IF-ELSE conditions
* Functions
* Switch Case
* Filing to store data.

1. **Link to source**

https://drive.google.com/drive/folders/1dUx3zmL523ZG0UxPG4QOITiG98M\_56yk?usp=sharing